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- (71) Applicant (for all designated States except US): **DOW GLOBAL TECHNOLOGIES INC.** [US/US]; Washington Street, 1790 Building, Midland, MI 48674 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **GAN, Joseph** [FR/FR]; 100, Route du Polygone, Strasbourg, F-671000, Bas-Rhin (FR). **KING, Bruce** [BE/US]; 1415 West Carpenter Street, Midland, MI 48640 (US). **REGO, Jose, M.** [ES/NL]; Vlasstraat 31, Heikant, Zeeland 4566BC (NL). **YOUNGSON, Chris, G.** [US/US]; 1413 Whitehall Street, Midland, MI 48642 (US).
- (74) Agent: **MORSE, Jonathan, W.**; The Dow Chemical Company, Intellectual Property Section, P.O. Box 1967, Midland, MI 48674-1967 (US).
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(54) Title: HALOGEN FREE IGNITION RESISTANT THERMOPLASTIC RESIN COMPOSITIONS

(57) Abstract: The present invention is a halogen-free ignition resistant polymer composition comprising: A) a thermoplastic polymer or polymer blend, B) a modified multi-functional epoxy resin containing from 0-20 wt. percent residual epoxy groups, based on the total weight of the epoxy resin, and C) a phosphorus containing compound. The use of a modified multifunctional epoxy compound having from 0-20 weight percent residual epoxy groups, enhances the flame retardancy of the thermoplastic polymer, and can increase the compatibility of the epoxy resin with the thermoplastic polymer through the use of the modified functionalities, without causing black specks in the final product. It has been additionally discovered that modified multi-functional epoxy resins can also contribute to improved mechanical properties, melt flow rate and processability.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C08L C08K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/100947 A (CHEIL IND INC ;YANG JAE HO (KR); BAE SU HAK (KR); HONG SANG HYUN () 19 December 2002 (2002-12-19) examples	1, 5, 11, 19
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 14, 5 March 2001 (2001-03-05) & JP 2000 309699 A (TEIJIN CHEM LTD), 7 November 2000 (2000-11-07) abstract	1, 2, 5

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Engel, S

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Information on patent family members

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